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Perinatal Hepatitis B Prevention Program (PHBPP)

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Mission: To identify hepatitis B surface antigen-positive (HBsAg-positive) women prenatally or at delivery for each pregnancy so that their infants, household and sexual contacts can be tested and treated to prevent the spread of the hepatitis B virus (HBV).

Surveillance: Statewide, an average of 332 HBsAg-positive pregnant women is reported annually. Based on Centers for Disease Control and Prevention (CDC) estimates, 396-597 HBsAg-positive pregnant women should be identified annually.

Prevention: Prevention of perinatal hepatitis B transmission requires the coordinated transfer of information between laboratories, primary care providers, hospitals, and the local/state health departments to ensure that all:

- Pregnant women are screened for HBsAg, results are sent to the delivery hospital with the prenatal care record, and all HBsAg-positive results are reported to the local health department (LHD) in the county where the patient resides.
- Household and sexual contacts of HBsAg-positive pregnant women are identified, tested and immunized if susceptible.
- Infants of HBsAg-positive women receive appropriate prophylaxis and post-vaccination serology.

To view the manual in its entirety or to obtain additional copies go to www.michigan.gov/hepatitisb.

See the 12/23/05 MMWR: "A Comprehensive Immunization Strategy to Eliminate Transmission of Hepatitis B Virus Infection in the United States" for the latest Advisory Committee on Immunization Practices (ACIP) recommendations, at <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5416a1.htm>.

Overview: What Laboratories Need to Know

Laboratory-based reporting is the route by which hepatitis B surface antigen-positive (HBsAg-positive) cases are identified. Since 1988, Michigan has required laboratories to report all HBsAg-positive test results to the ordering physician and within 24 hours to the local health department (LHD) in the county where the patient resides. Since the implementation of the Michigan Disease Surveillance System (MDSS), laboratories are now able to electronically submit HBsAg-positive test results directly to the state and local health departments.

The goal of the Perinatal Hepatitis B Prevention Program (PHBPP) is to ensure that all HBsAg-positive pregnant women are identified and their lab results are reported in a timely manner. To assist in achieving this goal:

1. Report all HBsAg-positive test results within 24 hours to the LHD/Communicable Disease Unit in the county where the patient resides, by:
 - A. Faxing a copy of the HBsAg-positive result (An optional Local Health Department Fax Cover Sheet is on page 4), or
 - B. Electronically submitting this data through MDSS (If you are not currently enrolled in MDSS, please contact your LHD/Communicable Disease Unit), or
 - C. Calling, if systems are down (A Directory of Michigan Health Departments by County is located on the back of the Reportable Diseases in Michigan on page 6).
2. Continue to report all HBsAg test results to the ordering physician's office.

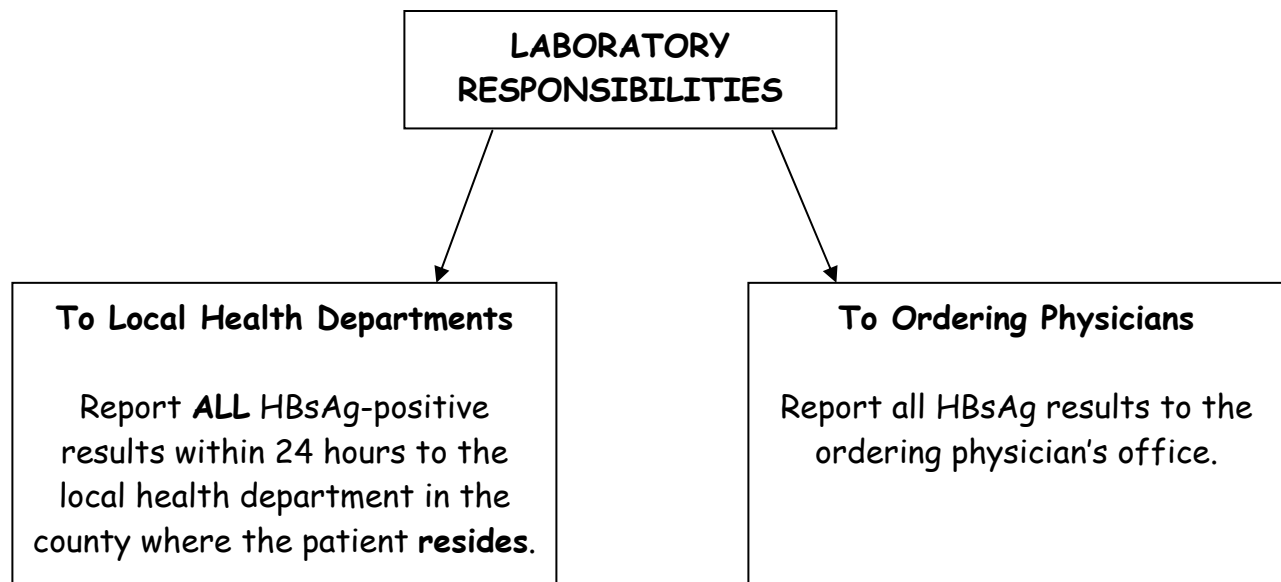
All laboratories that provide HBsAg testing of pregnant women should use an FDA-licensed or approved HBsAg test and should perform testing according to the manufacturer's labeling, including testing of initially reactive specimens with a licensed neutralizing confirmatory test (MMWR 12/23/05, 54 (RR16); 1-23).

If you have any questions, please call the PHBPP staff at 517-335-8122 or 800-964-4487. In southeast Michigan, call 313-456-4431 or 313-456-4432.

Michigan's Communicable Disease Rules, Section 333.5111, Act No. 368, Public Acts of 1978, as amended in R325.171, R325.172, and R325.173. In R325.173, Rule3 (5), a clinical laboratory shall report, within 24 hours of discovery, both of the following to the appropriate local health department: (a) Laboratory evidence of any serious infection specified in R325.172 except for human immunodeficiency virus which is governed by MCL 333.5114. (b) Laboratory evidence of any other disease, infection or condition that is judged by the laboratory director to indicate that the health of the public is threatened.

Health Insurance Portability and Accountability Act (HIPAA): Sharing of public health information (PHI) with public health authorities is addressed in §164.512(b): (1) Permitted disclosures: A covered entity may disclose protected health information for the public health activities and purposes to: (i) A public health authority that is authorized by law to collect or receive such information for the purpose of preventing or controlling disease, injury, or disability, including but not limited to, the reporting of disease, injury, vital events such as birth or death, and the conduct of public health surveillance, public health investigations, and public health interventions.

Laboratory Responsibilities for Reporting Hepatitis B Surface Antigen-Positive (HBsAg-positive) Results



Michigan's Communicable Disease Rules, Section 333.5111, Act No. 368, Public Acts of 1978, as amended in R325.171, R325.172 and R325.173.

Local Health Department

Michigan law requires laboratories to report all hepatitis B surface antigen-positive (HBsAg-positive) results within 24 hours to the local health department in the county where the patient resides.

FAX COVER SHEET

Date: _____

To: _____

Office: _____

Phone: _____

Fax: _____

From: _____

Office: _____

Phone: _____

Fax: _____

Hepatitis B surface antigen-positive (HBsAg-positive) result

Please provide a copy of the actual HBsAg-positive lab report with this completed form.

Total number of pages including the cover page _____

Michigan's Communicable Disease Rules, Section 333.5111, Act No. 368, Public Acts of 1978, as amended in R325.171, R325.172, and R325.173. In R325.173, Rule3 (5), a clinical laboratory shall report, within 24 hours of discovery, both of the following to the appropriate local health department: (a) Laboratory evidence of any serious infection specified in R325.172 except for human immunodeficiency virus which is governed by MCL 333.5114. (b) Laboratory evidence of any other disease, infection or condition that is judged by the laboratory director to indicate that the health of the public is threatened.

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Confidentiality Notice: These documents contain information, which is confidential in nature. The information is for the sole use of the intended recipient(s) named on the cover sheet. If you are not the intended recipient, you are hereby notified that any disclosure, distribution or copying, or the taking of any action in regard to the contents of this information is solely prohibited. If you have received this fax in error, please telephone us immediately so that we can correct the error and arrange for destruction or return of the faxed documents.

Hepatitis B Facts: Testing and Vaccination

Who should be vaccinated?

The following persons should receive routine hepatitis B vaccination according to the Centers for Disease Control and Prevention (CDC):

Routine vaccination:

- All newborns at birth prior to hospital discharge
- All children and teens ages 0 through 18 years
- All persons who wish to be protected from hepatitis B virus (HBV) infection. CDC states it is not necessary for the patient to disclose a risk factor in order to receive hepatitis B vaccine.

Persons who are at risk for sexual exposure:

- Sexually active persons who are not in long-term mutually monogamous relationships
- Sex partners of HBsAg-positive persons
- Persons seeking evaluation or treatment for an STD
- Men who have sex with men

Persons at risk for infection by percutaneous or mucosal exposure to blood:

- Current or recent injection-drug users
- Household contacts of HBsAg-positive persons
- Residents and staff of facilities for developmentally challenged persons
- Healthcare and public safety workers with reasonably anticipated risk for exposure to blood or blood-contaminated body fluids
- Persons with end-stage renal disease and those receiving dialysis.

Others:

- Travelers to areas with moderate or high rates of HBV infection
- Persons with chronic (life-long) liver disease
- Persons with HIV infection

All refugees, immigrants, and adoptees from countries with moderate or high rates of HBV infection should be screened. Adults should discuss their need or desire for hepatitis B vaccination with their healthcare providers.

Hepatitis B lab nomenclature

HBsAg: *Hepatitis B surface antigen* is a marker of infectivity. Its presence indicates either acute or chronic HBV infection.

anti-HBs: *Antibody to hepatitis B surface antigen* is a marker of immunity. Its presence indicates an immune response to HBV infection, an immune response to vaccination, or the presence of passively acquired antibody. (It is also known as **HBsAb**, but this abbreviation is best avoided since it is often confused with abbreviations such as HBsAg.)

anti-HBc (total): *Antibody to hepatitis B core antigen* is a nonspecific marker of acute, chronic, or resolved HBV infection. It is *not* a marker of vaccine-induced immunity. It may be used in prevaccination testing to determine previous exposure to HBV infection. (It is also known as **HBcAb**, but this abbreviation is best avoided since it is often confused with other abbreviations.)

IgM anti-HBc: *IgM antibody subclass of anti-HBc*. Positivity indicates recent infection with HBV (within the past 6 mos). Its presence indicates acute infection.

HBeAg: *Hepatitis B “e” antigen* is a marker of a high degree of HBV infectivity, and it correlates with a high level of HBV replication. It is primarily used to help determine the clinical management of patients with chronic HBV infection.

Anti-HBe: *Antibody to hepatitis B “e” antigen* may be present in an infected or immune person. In persons with chronic HBV infection, its presence suggests a low viral titer and a low degree of infectivity.

HBV-DNA: *HBV Deoxyribonucleic acid* is a marker of viral replication. It correlates well with infectivity. It is used to assess and monitor the treatment of patients with chronic HBV infection.

Screening before vaccination

Serologic testing prior to vaccination may be undertaken based on your assessment of your patient’s level of risk and your or your patient’s need for definitive information (see information in the left column). If you decide to test, draw the blood first, and then give the first dose of vaccine at the same office visit. Vaccination can then be continued, if needed, based on the results of the tests. If you are not sure who needs hepatitis B screening, consult your state or local health department.

Tests	Results	Interpretation	Vaccinate?
HBsAg anti-HBc anti-HBs	negative negative negative	susceptible	vaccinate if indicated
HBsAg anti-HBc anti-HBs	negative negative positive with $\geq 10\text{mIU/mL}^*$	immune due to vaccination	no vaccination necessary
HBsAg anti-HBc anti-HBs	negative positive positive	immune due to natural infection	no vaccination necessary
HBsAg anti-HBc IgM anti-HBc anti-HBs	positive positive positive negative	acutely infected	no vaccination necessary
HBsAg anti-HBc IgM anti-HBc anti-HBs	positive positive negative negative	chronically infected	no vaccination necessary (may need treatment)
HBsAg anti-HBc anti-HBs	negative positive negative	four interpretations possible [†]	use clinical judgment

*Postvaccination testing, when it is recommended, should be performed 1–2 months after the last dose of vaccine. Infants born to HBsAg-positive mothers should be tested 3–9 months after the last dose of vaccine.

- [†]1. May be recovering from acute HBV infection
2. May be distantly immune, but the test may not be sensitive enough to detect a very low level of anti-HBs in serum
3. May be susceptible with a false positive anti-HBc
4. May be chronically infected and have an undetectable level of HBsAg present in the serum

Managing chronic HBV infection

When you identify a patient who is chronically infected with HBV, make sure you consult a specialist knowledgeable in the treatment of liver disease so your patient’s care is optimized. Chronically infected persons need medical evaluation every 6–12 months to assess the status of their liver health and their need for antiviral therapy, as well as to screen for liver cancer. Persons with HBV infection should also be educated about their disease and how to protect others.

Household members and sex partners should be tested for HBV infection and given the first dose of hepatitis B vaccine at the same visit. (Vaccinating a person who has already been infected will do no harm). If testing indicates HBV susceptibility, complete the hepatitis B vaccination series. If testing indicates HBV infection, consultation and further care with a physician knowledgeable about chronic hepatitis B is needed.

REPORTABLE DISEASES IN MICHIGAN

A Guide for Physicians, Health Care Providers and Laboratories

The following is a list of conditions that should be reported to the local health department without delay if the agent is identified by clinical diagnosis, direct examination, culture, serology, molecular techniques or by histopathology.

Acquired Immunodeficiency Syndrome (AIDS)

Avian influenza

Bacillus anthracis (Anthrax)

Blastomyces dermatitidis

Bordetella pertussis (Pertussis)

Borrelia burgdorferi (Lyme Disease)

Brucella species

Burkholderia pseudomallei

Burkholderia mallei

Calymatobacterium granulomatis

Campylobacter jejuni

Chlamydia psittaci (Psittacosis)

Chlamydia trachomatis (Genital infections), (LGV)

Chlamydia trachomatis (Trachoma)

Clostridium botulinum (Botulism)

Clostridium tetani (Tetanus)

Coccidioides immitis (Coccidioidomycosis)

Corynebacterium diphtheriae (Diphtheria)

Coxiella burnetii (Q Fever)

Cryptococcus neoformans

Cryptosporidium species

Cyclospora species

Dengue virus

Ehrlichia species

Encephalitis, viral

California serogroup

Eastern Equine

Powassan

St. Louis

Western Equine

West Nile

Unspecified

Entamoeba histolytica (Amebiasis)

Escherichia coli, O157:H7 and all other shiga toxin positive serotypes

Francisella tularensis (Tularemia)

Giardia lamblia

Guillain-Barre Syndrome

Haemophilus ducreyi (Chancroid)

Haemophilus influenzae, <15 years of age, sterile site

Hantavirus

Hemolytic Uremic Syndrome (HUS)

Hemorrhagic fever viruses

Hepatitis, viral

Hepatitis A virus, (Anti-HAV IgM)

Hepatitis B virus, (HBsAg)

within 24 hours on pregnant women

Hepatitis C virus, (Anti-HCV)

Hepatitis, non-ABC

Histoplasma capsulatum

HIV, (Confirmed positive HIV serology and detection tests; CD4 counts/percents and all viral loads on people already known to be infected)

Influenza virus (Weekly aggregate counts)

Kawasaki Disease

Leptospira species

Legionella species

Listeria monocytogenes

Meningitis, viral

Meningitis, bacterial

Measles virus (Rubeola)

Mumps virus

Mycobacterium bovis

Mycobacterium leprae (Leprosy)

Mycobacterium tuberculosis (Tuberculosis)

Neisseria gonorrhoeae (Gonorrhea)

Neisseria meningitidis, sterile sites (Meningococcal Disease)

Orthopox viruses (Smallpox, Monkeypox)

Poliovirus

Plasmodium species (Malaria)

Rabies virus

Reye's Syndrome

Rheumatic fever

Rickettsia rickettsii (Rocky Mountain Spotted Fever)

Rickettsia species (Typhus Group)

Rubella virus

Salmonella species

Salmonella Typhi (Typhoid Fever)

Severe Acute Respiratory Syndrome (SARS)

Shigella species

Spongiform Encephalopathy (Includes CJD)

Staphylococcus aureus, vancomycin intermediate/resistant (VISA/VRSA)

Staphylococcus aureus, (MRSA), outbreaks only

Streptococcus pyogenes, group A, sterile sites

Streptococcus pneumoniae, sterile sites, susceptible/resistant

Toxic Shock Syndrome

Treponema pallidum (Syphilis)

Trichinella spiralis (Trichinosis)

Varicella (Chickenpox)

Vibrio cholerae (Cholera)

Yellow fever virus

Yersinia enterocolitica

Yersinia pestis (Plague)

LEGEND

Green Bold Text = An isolate or serum sample, where appropriate, is to be submitted to MDCH laboratory.

**Report All Listed Conditions to the
Local Health Department (see reverse)
This reporting is expressly allowed under HIPAA
Communicable Disease Rules: R 325.171, 172, 173**

DIRECTORY OF MICHIGAN HEALTH DEPARTMENTS BY COUNTY

Please check your phone directory to see if there is a branch office in your community if the number listed is long distance. Write that number here: _____

COUNTY	HEALTH DEPT.	COUNTY OFFICE	AREA	PHONE	FAX
Alcona	District 2	Harrisville	989	724-6757	724-9975
Alger	LMAS DHD	Munising	906	387-2297	387-2224
Allegan	Allegan County	Allegan	269	673-5411	673-2163
Alpena	District 4	Alpena	989	356-4507	354-0855
Antrim	NW MI Com Health	Bellaire	231	533-8670	547-0460
Arenac	Cent MI DHD	Standish	989	846-6541	846-0431
Baraga	Western UP Dist	Hancock	906	524-6142	524-6144
Barry	Barry-Eaton DHD	Hastings	269	945-9516x114	945-2413
Bay	Bay County	Bay City	989	895-4003	895-2083
Benzie	Benzie-Leelanau DHD	Benzonia	231	256-0210	882-0143
Berrien	Berrien County	Benton Harbor	269	927-5627	926-8129
Branch	Branch/Hills/St Jo	Coldwater	517	279-9561	278-2923
Calhoun	Calhoun County	Battle Creek	269	969-6334	969-6488
Cass	VanBuren-Cass DHD	Cassopolis	269	445-5280	445-5278
Charlevoix	NW MI Community	Charlevoix	231	547-6523	547-0460
Cheboygan	District 4	Cheboygan	231	627-8850	627-9466
Chippewa	Chippewa County	Sault Ste. Marie	906	635-3577	635-7081
Clare	Cent MI DHD	Harrison	989	539-6731	539-4449
Clinton	Mid-Mich DHD	St. Johns	989	227-3111	227-3126
Crawford	District 10	Grayling	989	348-7800	348-5346
Delta	Delta-Men Dist	Escanaba	906	786-4111	786-7004
Dickinson	Dick-Iron Dist	Iron River	906	774-1868	265-4174
Eaton	Barry-Eaton DHD	Charlotte	517	541-2641	541-2666
Emmet	NW MI Community	Petoskey	231	347-6014	547-0460
Genesee	Genesee County	Flint	810	257-1017	257-3247
Gladwin	Cent MI DHD	Gladwin	989	426-9431	426-6952
Gogebic	Western UP Dist	Bessemer	906	667-0200	667-0020
Gd Trav.	Grand Traverse Co.	Traverse City	231	922-2718	922-2719
Gratiot	Mid-Mich DHD	Ithaca	989	875-1019	875-1032
Hillsdale	Branch/Hills/St Jo	Hillsdale	517	437-7395x200	437-0166
Houghton	Western UP DHD	Hancock	906	482-7382	482-9410
Huron	Huron Co	Bad Axe	989	269-9721	269-4181
Ingham	Ingham Co	Lansing	517	887-4308	887-4379
Ionia	Ionia Co	Ionia	616	527-5339	527-8208
Iosco	District 2	Tawas City	989	362-6183	362-7181
Iron	Dick-Iron DHD	Stambaugh	906	265-9913	265-4174
Isabella	Cent MI DHD	Mt. Pleasant	989	773-5921	773-4319
Jackson	Jackson Co	Jackson	517	768-1664	788-4256
Kalamazoo	Kalamazoo Co	Kalamazoo	269	373-5267	373-5060
Kalkaska	District 10	Kalkaska	231	258-8669	258-2805
Kent	Kent Co	Grand Rapids	616	632-7228	632-7085
Keweenaw	Western UP DHD	Hancock	906	482-7382	482-9410
Lake	District 10	Baldwin	231	745-4663	745-2501

In general, health care providers should seek consultation regarding communicable disease prevention and control services through their local health department.

COUNTY	HEALTH DEPT.	COUNTY OFFICE	AREA	PHONE	FAX
Lapeer	Lapeer Co	Lapeer	810	245-5827	667-0232
Leelanau	Benzie-Leelanau	Lk Leelanau	231	256-0210	256-7399
Lenawee	Lenawee County	Adrian	517	264-5234	264-0790
Livingston	Livingston County	Howell	517	546-9850	545-9685
Luce	LMAS DHD	Newberry	906	293-5107	293-5453
Mackinac	LMAS DHD	St. Ignace	906	643-1100x14	643-7719
Macomb	Macomb County	Mt. Clemens	586	783-8190	493-0075
Manistee	District #10	Manistee	231	723-3595	723-1477
Marquette	Marquette County	Negaunee	906	475-7844x23	475-4435
Mason	District #10	Ludington	231	845-7381	845-9374
Mecosta	District #10	Big Rapids	231	592-0130	592-9464
Menominee	Delta/Men Dist	Menominee	906	863-4451	863-7142
Midland	Midland County	Midland	989	832-6666	837-6524
Missaukee	District #10	Lake City	231	839-7167	839-7908
Monroe	Monroe County	Monroe	734	240-7832	240-7906
Montcalm	Mid-Mich DHD	Stanton	989	831-3615	831-3666
Montmorency	District 4	Atlanta	989	785-4428	785-2217
Muskegon	Muskegon Co	Muskegon	231	724-4421	724-1325
Newaygo	District 10	White Cloud	231	689-7300	689-5295
Oakland	Oakland County	Pontiac	248	858-1286	858-0178
Oceana	District 10	Hart	231	873-2193	873-4248
Ogenaw	District 2	West Branch	989	345-5020	345-1996
Ontonagon	Western UP Dist	Ontonagon	906	884-4096	884-2358
Osceola	Cent MI Dist	Reed City	231	832-5532	832-1020
Oscoda	District 2	Mio	989	826-3970	826-5386
Otsego	NW MI Dist	Gaylord	989	732-1794	231-547-0460
Ottawa	Ottawa County	Holland	616	396-5266	393-5659
Pres. Isle	District 4	Rogers City	989	734-4723	734-3866
Roscommon	Cent MI Dist	Prudenville	989	366-9166	366-8921
Saginaw	Saginaw Co	Saginaw	989	758-3887	758-3888
St. Clair	St. Clair Co	Port Huron	810	987-5729	985-4340
St. Joseph	Branch/Hills/St Jo	Three Rivers	269	273-2161x200	273-2452
St. Joseph	Branch/Hills/St Jo	Sturgis	269	659-4013x200	651-6090
Sanilac	Sanilac	Sandusky	810	648-4098	648-5806
Shiawassee	LMAS DHD	Manistiquie	906	341-6951	341-5230
Shiawassee	Shiawassee Co	Corunna	989	743-2356	743-2362
Tuscola	Tuscola Co	Caro	989	673-8114	673-7490
VanBuren-Cass DHD	VanBuren-Cass DHD	Hartford	269	621-3143	621-2725
Washtenaw Co	Washtenaw Co	Ypsilanti	734	544-6770	544-6706
Wayne (out-Wayne)	Wayne Co	Wayne	734	727-7078	727-7083
Detroit	Detroit City	Detroit	313	876-4138	876-0070
Wexford	District 10	Cadillac	231	775-9942	775-4127